Application No.: 10/028,573

Office Action Dated: February 27, 2006

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

REMARKS

Acknowledgement:

Applicants would like to express their sincere appreciation to the Examiner for considering their filing of February 7, 2006 and issuing an advisory action in this case in a timely manner. Applicants would also like to thank the Examiner for withdrawing previously issued claim rejections based on 35 U.S.C. § 112.

Status of the Claims:

With the Office Action dated November 7 2005, claims 1-5, 18-28, and 30 are pending in this Application. All of those claims stand rejected in accordance with the following:

Claim 1	Malek in view of Lynn and Chien
Claim 2	Malek, Lynn, Chien and Bender
Claims 3-5	Malek, Lynn, Chien, and Schneier
Claim 18-23	Malek, Lynn, Chien, Schneier and Dent
Claim 24	Malek, Lynn, Chien, Schneier, Bender, Dent
	and NetBEUI
Claims 25-27, 30	Malek, Lynn, and Dent
Claim 28	Malek, Lynn, Chien, and Schneier

Amendments and Arguments:

By this response and amendment, Applicants are not acquiescing to any rejections previously made in the prosecution of this case nor conceding or waiving any arguments previously made by Applicants. Although Applicants do not believe that any amendments to the claims are required for patentability or to distinguish over the prior art, with this response, certain claims, including Claim 1, have been amended to better clarify the claimed invention.

The method of claim 1 states that the control data contains a particular control message, and includes the steps of detecting that particular control message, and based on that detection, determining the number of control bytes to be transmitted and using that

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number to load and initialize the encryption synchronization counter in response thereto. The cryptosytem is initialized when the encryption synchronization counter decrements to zero.

Applicants respectfully traverse the rejection of claim 1 wherein Malek is applied in view of Lynn and Chien. As set forth in Applicants' response of February 7, 2006, Malek does not teach using a control part to initiate an encryption or decryption process. In contrast, Malek has a separate synchronization part which includes a synchronization marker to synchronize a cipher system that has already been initiated. In the Advisory Action, the Examiner states that "[E]ven though the synchronization part 204 and the control part are separate they are both require [sic] for synchronization," citing the passage in column 4, lines 47-57. However, reading further in that same sequence, Malek states "by synchronizing the encryption and decryption circuitry by means of synchronization signals already available:.." (Col. 4, lines 65-67). Applicants respectfully assert that Malek, read in its entirety, teaches synchronization based only on a separate and distinct synchronization part. If the Examiner relies on the cited passage in column 4, lines 47-57 for this teaching, then the reference must fail for inadequate disclosure because it does not teach how the control part is used and such use is not evident to those skilled in the art. The remainder of the specification, including the claims, make clear that a synchronization marker in a synchronization part controls the encryption / decryption synchronization. A stray statement unsupported by the specification or drawings which is not evident to those skilled in the art, without more, is inadequate to apply as a prior art reference. Furthermore in his Advisory Action, in response to Applicants' argument that Malek enables, but does not initiate, encryption, the Examiner states that Malek teaches that both the synchronization part and control part are used for the synchronization and therefore the encryption or decryption cannot be started without the correct control part. This is contrary to Examiner's previous statement on page 3 and elsewhere in the Office Action dated November 7, 2005 where the Examiner acknowledges that "Malek fails to disclose initiating an encryption/decryption process and the counter". This is further evidence that Malek does not teach in any respect the initiation of a cryptosystem in response to detection of a particular control message.

Moreover, contrary to the Examiner's assertion, nowhere in Malek is the control data unencrypted as set forth in Claim 1. Malek uses the synchronization marker to "synchronize the encryption and decryption of the information carried in the user data part

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208 as well as any user signaling that is carried in the control part [2]06." (Col. 4, lines 54-57). FIG. 2 clearly shows the user data part 208 and the control part 206, both of which are part of the data part 205 and separate from the synchronization part 204 and which, according to the specification, are encrypted.

Finally, Malek teaches that the control part 206 is 64 bits long (see, e.g., FIG. 2). As such, there would be no need to determine the number of the control message bytes and loading that number into a encryption synchronization counter because that number would never change.

With respect to Lynn, the Examiner states that Lynn teaches a counter (col. 5, line 40 to col. 6, line 23). The counter in Lynn is directed to generating a new initialization vector for the encryption key, not to initialize a cryptosystem. The counter 21 is operated by initially loading a maximum count signal 19 into the counter 21." (col. 5, lines 57-58). When the counter gets to zero, then a new initialization vector is generated. The use of the counter in this manner is to "improve the efficiency of the transmitter 10" (col. 5, lines 56-57). Lynn does not teach loading an encryption synchronization counter with the number of control message bytes to be transmitted, decrementing that counter to zero and when that counter is zero, initializing the cryptosystem.

With respect to Chien, the Examiner states that Chien teaches the use of an encrypted airlink packet. In view of the foregoing traversals, Applicants, while not conceding the Examiner's position with respect to Chien and respectfully reserving their rights to challenge the application of Chien, believe that no response to this allegation is necessary in order for Claim 1 to be in condition for allowance.

With respect to claims 2, 3, 4, and 5, all of which depend from Claim 1, Applicants believe that in view of the foregoing amendments to and traversals with respect to Claim 1, claims 2-5 are now also in condition for allowance and while not waiving their rights to do so, no specific traversals or amendments are required.

Although Applicants do not believe that any amendments are required for patentability or to distinguish over the prior art, with this response Claim 18 has also been amended to better clarify the claimed invention. The computer readable medium of claim 18 detects a particular control message within control data that passes through an associated control channel. In response to this detection, it determines the size of the control data and

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loads the size of the control data into a counter wherein the counter decrements when each portion of the control data is sent. When the counter reaches zero, it initiates an encryption or decryption synchronization process and encrypts the transmissions following the control message.

Applicants' traversals with respect to the teachings of Malek and Lynn as applied to claim 1 are equally applicable to claim 18. Moreover, neither Malek or Lynn teach detecting a particular control message within the control data and determining the size of the control data as the basis for the counter. Likewise, neither teach that the control data is unencrypted. Accordingly, in view of the amendments to and traversals with respect to Claim 18, it is believed that Claim 18 is now in condition for allowance.

With respect to claims 19-24, all of which depend from Claim 18, Applicants believe that in view of the foregoing amendments to and traversals with respect to Claim 18, claims 19-24 are now also in condition for allowance and while not waiving their rights to do so, no specific traversals or amendments are required.

Although Applicants do not believe that any amendments are required for patentability or to distinguish over the prior art, with this response, Claims 25 and 27 have also been amended to better clarify the claimed invention. With respect to claim 25, the control message to be detected is in an unencrypted control data portion of a data transmission. With respect to claim 27, control data blocks are counted when transmitted and compared to the total number of control data blocks to determine when to begin encryption or decryption.

With respect to claims 25 and 27, the traversals set forth above with respect to Claim 1 and 18 are equally applicable to claim 25. Neither Malek nor Lynn teach an encryption synchronization means configured to detect a particular control message in an unecrypted control data portion of a data transmission as a way of synchronizing encryption or decryption. Moreover, Lynn does not teach an encryption synchronization means further configured to count control data blocks in a message being transmitted and compare that count to the total number of control data blocks. As set forth above, the counter in Lynn merely determines when to change an initialization vector for the encryption key to achieve transmitter efficiency. Accordingly, Applicants believe that claims 25 and 27 are in condition for allowance.

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Moreover, with respect to claims 26, 28, and 30, all of which depend directly or indirectly from Claim 25, Applicants believe that in view of the foregoing amendments to and traversals with respect to Claim 25, claims 26, 28 and 30 are now also in condition for allowance and while not waiving their rights to do so, no specific traversals or amendments are required.

With the filing of this RCE and this response to the Office Action dated November 7, 2005, Applicants have diligently and completely responded to the rejections and arguments set forth by the Examiner in order to place this application in condition for allowance. In view thereof, Applicants respectfully request that the Examiner reconsider and reverse the rejections set forth in the Office Action in light of the amendments and arguments set forth herein and issue a Notice of Allowance. If it would help expedite the issuance of such allowance, Applicants invite the Examiner to contact their undersigned representative at 404.459.5644 to discuss this response or any other aspect of this case

Respectfully submitted,

Date: May 8, 2006

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